



RUSSELL
HART/R5/USEPA/US
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To
Subject Area 9/10 - Review - Outside Container Storage Area - Mass
Reduction Work Plan

Dear Mr. Curnock - I have received a copy of the above-noted document, dated April 27, 2005. (I look forward to also receiving overall Area 9/10 conceptual design information, and horizontal drilling proposals). In reviewing the OSA Source Material Mass Reduction Work Plan, I have three main areas of comment:

1.) What provisions are to be made for air monitoring at the OSA perimeter such that assurance is provided that day-to-day Hamilton Sundstrand and other plant visitors are not adversely impacted by VOC vapor levels that could be related to excavation work conducted within the OSA? It would seem appropriate to have such monitoring capability in order to cease operations if necessary if VOC levels became too high. This reasoning would apply to adequate protection of nearby off-site personnel (residential areas, nearby shops, places of commerce, etc.).

2.) Introduction of the Hydrogen Release Compound - This procedure may have interest as a pilot application, but I think it may be premature to consider this a means of control for potential low-grade future groundwater sources for any significant portion of the overall plume or groundwater management zone. If I understand the proposed work plan correctly, certain existing monitoring wells within the OSA where excavation may proceed are to be dismantled and abandoned in accordance with IL EPA procedures on this subject. Then, after excavation the hydrogen releasing compound is to be introduced via slurry/solution injection. What wells are to be established to verify that the compound is indeed having a positive effect on VOC levels? Lacking such wells, it would seem difficult/impossible to be able to make a determination about the specific results using this compound. If one of the features of this compound is to enhance anaerobic conditions as opposed to aerobic conditions in groundwater, what monitoring, either of oxygen levels, populations of aerobic/anaerobic microbes will occur to help relate "cause and effect" associations that may be related to changes in VOC levels in groundwater after application? I appreciate that this technique may serve as a secondary means of source control, and may provide reassurance especially to State RCRA reviewers if excavation alone does not fully attain soil clean-up goals within the OSA. However, I would think that regulatory agency personnel would want to know some verifiable means of knowing what area/depth this slurry injection is affecting.

3.) The work plan divides the OSA zone into 8 subportions, based on soil boring results. For 6 of these 8 zones, it is projected that excavation to a depth of 4 feet will be adequate to attain - if not "final" soil cleanup goals, then at least sufficient mass removal to justify excavation cessation provided that some capping and/or material limiting further movement of contaminant mass into groundwater is applied. For 2 of the 8 zones, it is projected that excavation to 6 feet will be necessary. Soil constituent content after excavation is depicted in Table 2.2. Figure 3.2 depicts points showing "representative base sample location" and "representative wall sample location". In looking at the suggested wall sample locations, it appears that while the perimeter of the overall OSA area would get adequate sample coverage to verify reaching/satisfactorily approaching desired soil cleanup values, I am not so sure about the interior of the OSA zone. Shouldn't there be some verification sampling to go along with the inner walls of the eight zones for which soil borings were performed? This would seem especially important for the zones for which contaminant soil levels were quite high - zones S-1 and S-2 - and also for the zones where excavation is projected to be needed to go to the 6' depth level - in this case zones S-1 and S-5.

I look forward to discussing these comments with you and IL EPA, and to your response.

Russ Hart